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## **AMENDMENTS TO THE CLAIMS**

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As set forth in the Complete Listing of Claims section of this paper, Applicants hereby amend claims 21-40 and add new claims 41-64. Claims 1-20 were previously canceled by Preliminary Amendment dated May 11, 2006.

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## **COMPLETE LISTING OF CLAIMS**

The following listing of claims replaces all prior versions and listings of claims in this application:

## 1-20. (Canceled)

- 21. (Currently Amended) Intervertebral disk disc prosthesis comprising an upper plate, a lower plate, and a core, an upper convex surface of the core being in contact with at least part of a lower concave surface of the upper plate and a lower surface of the core being in contact with at least part of an upper surface of the lower plate, and the upper plate being moveable at least with respect to the core, and in which there are cooperation means not located in the middle of the core between the lower plate and the core, so as to limit or eliminate translation movements of the core with respect to the lower plate, around an axis substantially parallel to the lower plate, and to limit or eliminate rotation movements of the core with respect to the lower plate around an axis substantially perpendicular to the lower plate, the planes passing through the upper and lower-plates forming a substantially constant angle.
- 22. (Currently Amended) Intervertebral disk disc prosthesis according to claim 21, in which the lower plate comprises male means cooperating with female means of the core.
- 23. (Currently Amended) Intervertebral disk disc prosthesis according to claim 21, in which the lower plate comprises female means cooperating with male means of the core.
- 24. (Currently Amended) Intervertebral disk disc prosthesis according to any one of [[the]] claims 21, 22, or 23 in which [[the]] an angle between respective planes of the upper and lower plates is obtained in that the by the core forms having an acute angle in a front-rear direction.

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25. (Currently Amended) Intervertebral disk disc prosthesis according to claim 24, in which the lower plate and the upper plate are assembled with a second core rather than the core and the second core has a thickness that differs from the thickness of the core.

- 26. (Currently Amended) Intervertebral disk disc prosthesis according to any one of claims 24 or 25 22 or 23, in which the angle between the upper and lower plates is between 0° and 15°.
- 27. (Currently Amended) Intervertebral disk disc prosthesis according to claim 21, in which the core is movable with respect to the upper and/or lower plates, to compensate for relative positioning defects between the upper plate, the lower plate and the core of the prosthesis.
- 28. (Currently Amended) Intervertebral disk disc prosthesis according to claim 21, in which at least part of the lower surface of the upper plate is concave and complementary to the upper surface of the core.
- 29. (Currently Amended) Intervertebral disk disc prosthesis according to claim 21, in which the dimensions of each male means are slightly less than those of each female means so as to enable a slight clearance between the core and the lower plate.
- 30. (Currently Amended) Intervertebral disk disc prosthesis according to claim 21, in which the dimensions of each male means are substantially the same as those of each female means so as to inhibit clearance between the core and the lower plate.
- 31. (Currently Amended) Intervertebral disk disc prosthesis according to claim 22 or 23 24, in which the male means of the lower plate are two pins curved towards the inside of the prosthesis and located opposite each other on two edges of the prosthesis, and in that the female means of the core are two recesses.
- 32. (Currently Amended) Intervertebral disk disc prosthesis according to claim 31, in which at least one of the pins is replaced by a lug equipped with a drilling whereon a tag using a dowel entering the drilling.

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33. (Currently Amended) Intervertebral disk disc prosthesis according to claims 22 or 23 24, in which the male means of the lower plate are two dowel pins located proximal to near the center of the lower plate, in which the female means of the core are two wells.

- 34. (Currently Amended) Intervertebral disk disc prosthesis according to claims 22 or 23 24, in which the male means of the lower plate are two walls located opposite each other in proximal to along two edges of the prosthesis, and in which the female means of the core are recesses.
- 35. (Currently Amended) Intervertebral disk disc prosthesis according to claims 22 or 23 24, in which the male means of the lower plate are a rib located at the center of the prosthesis, and in which the female means of the core are a groove.
- 36. (Currently Amended) Intervertebral disk disc prosthesis according to claim 21, in which the core is made of polyethylene.
- 37. (Currently Amended) Intervertebral disk disc prosthesis according to claim 21, in which the lower plate comprises one or more openings proximal to along its front side, provided to receive prosthesis anchoring means in a vertebra.
- 38. (Currently Amended) Intervertebral disk disc prosthesis according to claim 37, in which the opening of the lower plate is rectangular, and in which the anchoring means comprise a body, forming an acute angle with the lower plate, and a head,
- 39. (Currently Amended) Intervertebral disk disc prosthesis according to claim 37, in which the openings of the lower plate are circular, and in which the anchoring means are nail-shaped.
- 40. (Currently Amended) Intervertebral disk disc prosthesis according to claim 21, in which the upper plate is convex on at least part of its upper surface to fit into the shape of the vertebrae.
- 41. (New) An intervertebral disc prosthesis for substitution of a fibrocartilaginous disc between adjacent vertebra in a spinal column comprising:

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an upper plate having a lower surface;

a lower plate having an upper surface;

a core having an upper surface and a lower surface,

the upper surface of the core being configured for contact with at least part of the lower surface of the upper plate and

the lower surface of the core being configured for contact with at least part of the upper surface of the lower plate, said contact of the lower surface of the core with at least part of the upper surface of the lower plate being configured for translation movements of the core with respect to the lower plate along an axis substantially parallel to the upper surface of the lower plate and for rotation movements of the core with respect to the lower plate around an axis substantially perpendicular to the upper surface of the lower plate; and

a stop comprising a male portion and a female portion each located along an edge of the prosthesis, the male portion and the female portion each configured to limit translation movements of the core with respect to lower plate and rotation movements of the core with respect to the lower plate.

- 42. (New) An intervertebral disc prosthesis according to claim 41 in which the upper surface of the core is convex and the lower surface of the upper plate is concave, and the lower surface of the core and the upper surface of the lower plate are each substantially planar.
- 43. (New) An intervertebral disc prosthesis according to claim 42 in which the upper plate has an upper surface that is convex and the lower plate has a lower surface that is substantially planar.
- 44. (New) An intervertebral disc prosthesis according to claim 43 further comprising anchors configured to engage an adjacent vertebra

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45. (New) An intervertebral disc prosthesis according to claim 44 in which the anchors are disposed on opposite sides of the prosthesis.

- 46. (New) An intervertebral disc prosthesis according to claim 41 in which the female portion is disposed on the lower plate and the male portion is disposed on the core.
- 47. (New) An intervertebral disc prosthesis according to claim 41 in which the male portion is disposed on the lower plate and the female portion is disposed on the core.
- 48. (New) An intervertebral disc prosthesis according to claim 47 in which the female portion is a recess.
- 49. (New) An intervertebral disc prosthesis according to claim 48 in which the recess is a groove.
- 50. (New) An intervertebral disc prosthesis according to claim 47 in which the male portion is a pin.
- 51. (New) An intervertebral disc prosthesis according to claim 47 in which the male portion is a tag fixed by a dowel.
- 52. (New) An intervertebral disc prosthesis according to claim 47 in which the male portion is a wall.
- 53. (New) An intervertebral disc prosthesis according to claim 47 in which the male portion is an inwardly curved pin.
- 54. (New) An intervertebral disc prosthesis according to claim 41 in which the core forms an acute angle in a front-rear direction.
- 55. (New) An intervertebral disc prosthesis according to claim 41 in which the core can have different thicknesses.

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56. (New) An intervertebral disc prosthesis for substitution of a fibrocartilaginous disc between adjacent vertebra in a spinal column comprising:

an upper plate having a lower surface;

- a lower plate having an upper surface;
- a core having an upper surface and a lower surface,

the upper surface of the core being configured for contact with at least part of the lower surface of the upper plate and .

the lower surface of the core being configured for contact with at least part of the upper surface of the lower plate, said contact of the lower surface of the core with at least part of the upper surface of the lower plate being configured for translation movements of the core with respect to the lower plate along an axis substantially parallel to the lower plate and for rotation movements of the core with respect to the upper surface of the lower plate around an axis substantially perpendicular to the upper surface of the lower plate; and

- a restraint comprising a stop and a recess each located in the vicinity of an edge of the prosthesis, the stop and the recess each configured to limit translation movements of the core with respect to lower plate and rotation movements of the core with respect to the lower plate.
- 57. (New) An intervertebral disc prosthesis according to claim 56 in which the upper surface of the core is convex and the lower surface of the upper plate is concave, and the lower surface of the core and the upper surface of the lower plate are each substantially planar.
- 58. (New) An intervertebral disc prosthesis according to claim 57 in which the upper plate has an upper surface that is convex and the lower plate has a lower surface that is substantially planar.
- 59. (New) An intervertebral disc prosthesis according to claim 58 further comprising anchors configured to engage an adjacent vertebra

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60. (New) An intervertebral disc prosthesis according to claim 59 in which the anchors are disposed on opposite sides of the prosthesis.

- 61. (New) An intervertebral disc prosthesis according to claim 56 in which the stop is a wall.
- An intervertebral disc prosthesis according to claim 56 in which 62. (New) the stop is a pin.
- 63. (New) An intervertebral disc prosthesis according to claim 56 in which the stop is a lug.
- б4. (New) An intervertebral disc prosthesis according to claim 56 in which the recess is a groove,